

What is claimed is:

1. A flywheel magneto generator, comprising:

a magneto rotor, which has a press formed cylindrical flywheel and a magnet fixed to an outer circumferential side of a peripheral wall portion of the flywheel; and

a stator, which is constructed by winding a generating coil around a core having a magnetic pole portion opposed to the outer circumference of the peripheral wall portion of the flywheel and a magnetic pole of said magnet via a gap;

wherein there is provided a through hole which pierces through said peripheral wall portion of said flywheel in a radial direction of the peripheral wall portion, a yoke plate provided so as to block one end of said through hole opened on an inner circumferential side of the peripheral wall portion of said flywheel is arranged on a inner circumferential side of said peripheral wall portion, and said magnet is arranged within said through hole, and is supported on said yoke plate, one magnetic pole face of said magnet being opposed to said yoke plate.

2. The flywheel magneto generator according to claim 1, wherein said generating coil is an ignition coil used in an ignition device for an internal combustion engine.

3. The flywheel magneto generator according to claim 1, wherein there is provided a magnet cover, which integrally comprises a cup-shaped cover main-body arranged so as to cover said magnet, a skirt-like magnet positioning portion which is provided so as to protrude to the outside from a hem portion of the cover main-body and whose outer circumferential portion is fitted over an inner circumference of said through hole, and a flanged plate

portion which is provided so as to extend in a manner protruding to the outside from an outer circumferential portion of said magnet positioning portion and which is sandwiched between said yoke plate and the peripheral wall portion of said flywheel on the side of the end of said through hole.

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4. The flywheel magneto generator according to claim 3, wherein an area surrounding said through hole of an inner circumferential surface of said peripheral wall portion is recessed on an outside diameter side of said flywheel so as to form an annular recessed portion for fitting said yoke plate, said yoke plate being positioned by being fitted into said annular recessed portion.

5. The flywheel magneto generator according to claim 4, wherein there is provided a magnet cover, which integrally comprises a cup-shaped cover main-body arranged so as to cover said magnet, a skirt-like magnet positioning portion which is provided so as to protrude to the outside from a hem portion of the cover main-body and whose outer circumferential portion is fitted over an inner circumference of said through hole, and a flanged plate portion which is provided so as to extend in a manner protruding to the outside from an outer circumferential portion of said magnet positioning portion and which is sandwiched between said yoke plate and the peripheral wall portion of said flywheel within said annular recessed portion.

6. The flywheel magneto generator according to claim 5, wherein said generating coil is an ignition coil used in an ignition device for an internal combustion engine.

7. A flywheel magneto generator, comprising:

a magneto rotor, which has a press formed cylindrical flywheel and a magnet fixed to an outer circumferential side of a peripheral wall portion of the flywheel; and

5 a stator, which is constructed by winding a generating coil around a core having a magnetic pole portion opposed to the outer circumference of the peripheral wall portion of the flywheel and a magnetic pole of said magnet via a gap;

10 wherein there is provided a through hole which pierces through said peripheral wall portion of said flywheel in a radial direction of the peripheral wall portion, and an area surrounding said through hole of said peripheral wall portion is recessed to an inner side of said radial direction, whereby a magnet housing recessed portion is formed in said peripheral wall portion, and

15 said magnet is housed in said magnet housing recessed portion, one magnetic pole face thereof being bonded to a bottom portion of said magnet housing recessed portion.

8. The flywheel magneto generator according to claim 7, wherein there is provided a magnet cover, which integrally comprises a cup-shaped cover main-body arranged so as to cover said magnet, a skirt-like magnet positioning portion which is provided so as to protrude to the outside from a hem portion of the cover main-body and whose outer circumferential portion is fitted over an inner circumference of said magnet housing recessed portion.

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